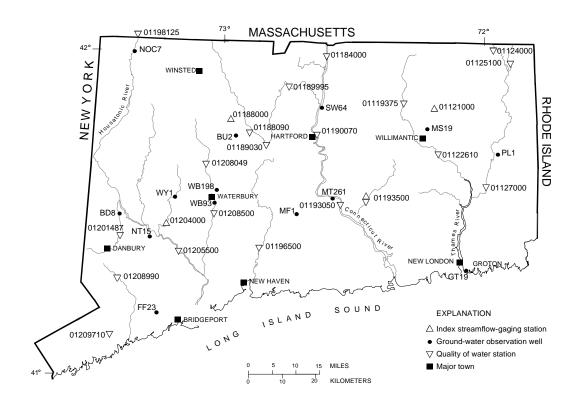
U.S. Department of the Interior

U.S. Geological Survey

WATER-RESOURCES CONDITIONS IN CONNECTICUT, APRIL 1999



The USGS provides maps, reports, and information to help others manage, develop, and protect America's water, energy, mineral, land, and biological resources.



DATA-COLLECTION SITES USED IN THIS REPORT

This report contains a small part of the ground-water, surface-water, and water-quality data collected by the USGS at sites in Connecticut. More complete information may be found in the annual Water-Data Report. Data for this report were collected by the USGS in cooperation with the Connecticut Dept. of Environmental Protection.

For more information on USGS programs in Connecticut, please contact Virginia de Lima (District Chief); 101 Pitkin St., East Hartford, CT 06108; **phone (860) 291-6740;** fax (860) 291-6799; dc_ct@usgs.gov

Additional earth science information, including this document, is on the USGS Home Page on the World Wide Web at http://www.usgs.gov or the Connecticut District home page at http://conn.er.usgs.gov For more information on all USGS reports and products (including maps, images, and computerized data), call 1-888-ASK-USGS

INDEX TO INFORMATION Data Sites 1 Reservoirs 5 Ground Water 2 Water Quality 6 Streamflow 4

GROUND-WATER LEVELS

Ground-water levels during April decreased in all wells, except for BU-2 (Burlington) and PL-1 (Plainfield), which increased. PL-1 (Plainfield) was in the above-normal range; MT-261 (Middletown), SW-64 (S. Windsor), and WY-1 (Woodbury) were in the normal range; the remaining wells reported here were in the below-normal range.

Ground-water levels are in feet below land surface. Statistics are based on period of record (through calendar year 1998).

WELL NUMBER AND TOWN	APRIL 1999 GROUND-WATER LEVEL (date measured)		MAR. 1999 GROUND- WATER LEVEL	APR. 1998 GROUND- WATER LEVEL	APR. MAXIMUM GROUND-WATER LEVEL (year recorded)		APR. MINIMUM GROUND-WATER LEVEL (year recorded)		APR. MEDIAN GROUND- WATER LEVEL
BD-8 (Brookfield)	4/29	29.45	28.77	28.82	26.33	1983	31.67	1985	28.90
BU-2 (Burlington)	4/27	18.10	18.52	17.68	13.00	1956	24.65	1985	16.67
FF-23 (Fairfield)	4/29	8.08	7.65	8.81	3.64	1980	8.17	1985	7.62
GT-19 (Groton)	4/19	15.22	14.12	13.26	9.47	1983	15.90	1963	13.77
MF-1 (Middlefield)	4/26	8.38	3.75	5.40	2.59	1983	9.69	1966	6.13
MS-19 (Mansfield)	4/27	10.50	9.60	9.96	7.85	1983	12.11	1985	9.91
MT-261 (Middletown)	4/26	19.16	18.54	18.79	17.16	1983	21.50	1975	19.15
NOC-7 (North Canaan)	4/14	9.35	9.09	9.35	7.37	1986	9.74	1968	9.24
NT-15 (Newtown)	4/29	4.26	2.37	3.40	0.70	1983	6.92	1985	3.09
PL-1 (Plainfield)	4/28	29.10	29.60	28.27	26.19	1983	31.57	1966	29.21
SW-64 (S. Windsor)	4/27	10.50	9.71	9.10	7.12	1983	13.99	1966	10.29
WB-93 (Waterbury)	4/29	27.45	25.50	26.85	23.61	1983	27.69	1985	26.60
WB-198 (Waterbury)	4/29	13.55	11.56	12.75	5.79	1983	18.53	1985	11.79
WY-1 (Woodbury)	4/29	21.64	20.67	21.32	18.70	1983	27.99	1944	21.43

(Ground-water level data collected by USGS personnel and individual observers.)

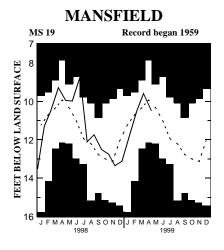
GROUND-WATER LEVELS (CONTINUED)

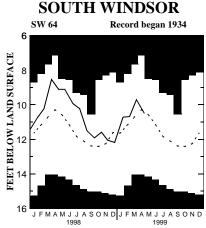
(Status of ground-water storage as indicated by the water level changes in observation wells, as shown on hydrographs)

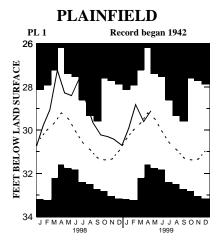


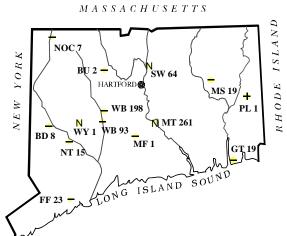
Shaded area on graphs show highest and lowest water levels of record through calendar year 1998. Solid line shows current water levels.

Dashed line is monthly median for period of record through calendar year 1998.









ABOVE NORMAL

Within the highest 25% of record for this month.



NORMAL RANGE

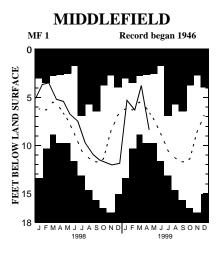
Between the highest and lowest 25% of record for this month.

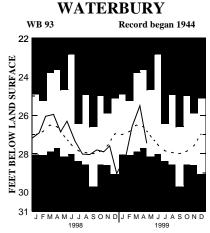


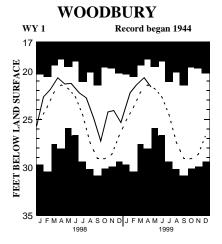
BELOW NORMAL

Within the lowest 25% of record for this month.









STREAMFLOW (measured in cubic feet per second)

PROVISIONAL DATA

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In general, streamflows in April were in the below-normal range. Mount Hope River (NE Connecticut) fell to the below-normal range after being in the above-normal range for the three consecutive months. Burlington Brook (NW Connecticut) fell to the below-normal range after being in the above-normal range for one month. Salmon River (SE Connecticut) also fell to the below-normal range after one month in the above-normal range. Pomperaug River (SW Connecticut) fell to the below-normal range after being in the normal range for the two consecutive months. Across the State, mean streamflow for April averaged 47 percent of the April long-term median value.

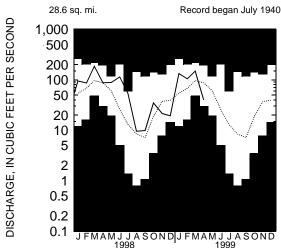
USGS STREAMFLOW-GAGING STATION NAME AND NUMBER	APR. 1999 MEAN	MAR. 1999 MEAN	APR. 1998 MEAN	APRIL APRIL MAXIMUM VALUE (year recorded) (year recorded)		VALUE	APR. MEDIAN (1961-90)	
MT HOPE RIVER (01121000)	40.1	149	87.7	197	1983	29.7	1985	87.2
BURLINGTON (01188000)	6.31	20.0	12.9	38.8	1983	4.26	1985	14.5
SALMON RIVER (01193500)	152	466	342	803	1983	110	1985	324
POMPERAUG (01204000)	117	301	195	693	1987	61.9	1985	224

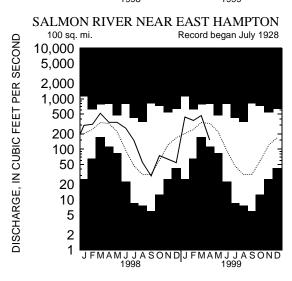
MONTHLY MEAN RUNOFF AT FOUR INDEX STATIONS

Shaded areas on graphs show highest and lowest monthly mean discharge of record.

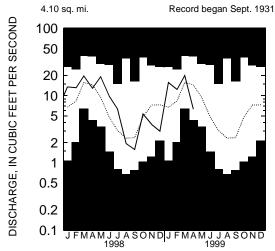
Current record Median (1961-1990)

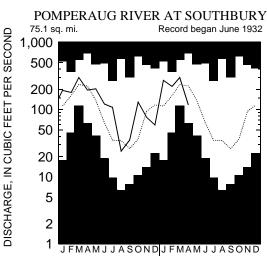
MOUNT HOPE RIVER NEAR WARRENVILLE



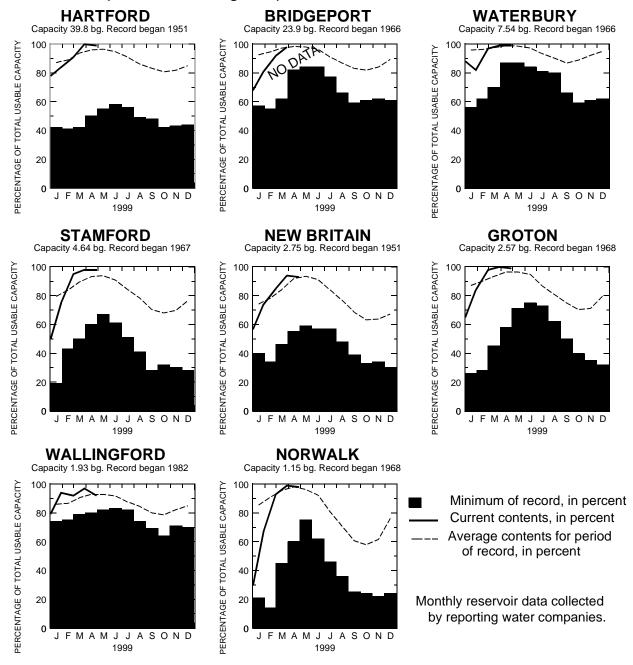


BURLINGTON BROOK NEAR BURLINGTON





RESERVOIRS (Contents in billion gallons)



RESERVOIR SYSTEM (usable capacity, in billion gallons)	MAR. CAPACITY (PERCENT)	APR. CAPACITY (PERCENT)	LONG-TERM AVERAGE CAPACITY FOR APRIL (PERCENT)		
Hartford (39.8 bg)	100	99	96		
Bridgeport (23.9 bg)	98	No data	98		
Waterbury (7.54bg)	99	99	99		
Stamford (4.64 bg)	98	98	93		
New Britain (2.75 bg)	94	93	92		
Groton (2.57 bg)	100	99	96		
Wallingford (1.93 bg)	97	92	93		
Norwalk (1.15 bg)	99	98	98		

U.S. Department of the Interior **U.S. Geological Survey Water Resources Division** 101 Pitkin St., E. Hartford, Connecticut 06108

CHEMICAL, PHYSICAL, AND BACTERIOLOGICAL QUALITY OF SELECTED STREAMS IN CONNECTICUT

[Station locations shown on front page; --, not applicable; streamflow measured in instantaneous cubic feet per second; % flow duration is that flow that was equaled or exceeded more than "X" percent of the time from 1961-90; bacteriological analysis reconnaissance data enumerated using membrane filter method with immediate incubation; col/100 mL, colonies

per 100 milliliters; K, results based on colony count outside the acceptable range (non-ideal colony count)]

USGS WATER-QUALITY STATION NAME AND NUMBER	SAMPLE DATE IN 1999	STREAMFLOW/ % FLOW DURATION	SPECIFIC CONDUCTANCE (in µS/cm at 25°C)	WATER TEMPERATURE (°C)	DISSOLVED OXYGEN CONCENTRATION (mg/L)/ %SATURATION	FIELD PH	FECAL COLIFORM (COL/100 mL)	ENTEROCOCCI (COL/100 mL)	
01119375 Willimantic R. at Merrow					PLED THIS N				
01122610 Shetucket R. at South Windham	4/14	552/44	96	10.5	10.9/99	7.43	41	10K	
01124000 Quinebaug R. at Quinebaug	SITE NOT SAMPLED THIS MONTH								
01125100 French R. at North Grosvenordale	SITE NOT SAMPLED THIS MONTH								
01127000 Quinebaug R. at Jewett City			SITE	NOT SAM	PLED THIS N	IONTH			
01184000 Connecticut R. at Thompsonville	4/7	43420/7	77	6.5	13.3/108	7.40	6K	14K	
01188090 Farmington R. at Unionville	4/20	497/44	96	9.5	12.8/113	7.23	3K	1K	
01189030 Pequabuck R. at Farmington	4/20	80.0/	267	11.0	10.7/98	7.11	32	8K	
01189995 Farmington R. at Tariffville	4/19	737/55	130	11.0	11.3/102	7.30	59	6K	
01190070 Connecticut R. at Hartford	4/21	/	92	10.5	11.0/99	7.42	35	8K	
01193050 Connecticut R. at Middle Haddam	4/5	/	91	6.5	12.5/101	7.40	168	54	
01193500 Salmon R. near East Hampton	4/12	152/40	98	9.0	12.3/108	7.36	20	4K	
01196500 Quinnipiac R. at Wallingford	4/6	213/36	324	11.0	12.9/115	8.20	820	292	
01198125 Housatonic R. near Ashley Falls, MA	SITE NOT SAMPLED THIS MONTH								
01201487 Still R. at Rt. 7 at Brookfield Center SITE NOT SAMPLED THIS MONTH									
01205500 Housatonic R. at Stevenson SITE NOT SAMPLED THIS MONTH									
01208049 Naugatuck R. near Waterville	SITE NOT SAMPLED THIS MONTH								
01208500 Naugatuck R. at Beacon Falls	SITE NOT SAMPLED THIS MONTH								
01208990 Saugatuck R. near Redding	4/26	39.8/35	202	14.0	11.3/102	8.10	21	5K	
01209710 Norwalk R. near Winnipauk	4/26	53.0/	321	14.0	11.4/112	7.60	80	10K	



